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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/773,139	
	Filing Date	January 31, 2001	
	First Named Inventor	Otero, Hernan G.	
	Art Unit	3628	
	Examiner Name	Jason M. Borlinghaus	
Total Number of Pages in This Submission	21	Attorney Docket Number	G08.050

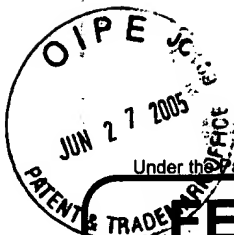
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<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance communication to (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Fee Transmittal, Credit Card Authorization for \$500.00 and Acknowledgement Postcard
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Signature			
Printed name	Nathaniel Levin		
Date	June 24, 2005	Reg. No.	34,860

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Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**\$500.00**

Complete if Known

Application Number	09/773,139
Filing Date	January 31, 2001
First Named Inventor	OTERO, Herman G.
Examiner Name	Jason M. Borlinghaus
Art Unit	3628
Attorney Docket No.	G08.050

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number
50-1852

Deposit Account Name

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims	<input type="text"/>	-20** =	<input type="text"/>	X	<input type="text"/>	<input type="text"/>
Independent Claims	<input type="text"/>	-3** =	<input type="text"/>	X	<input type="text"/>	<input type="text"/>
Multiple Dependent					<input type="text"/>	<input type="text"/>

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple dependent claim, if not paid	
1204	86	2204	43	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	\$500.00
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

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SUBTOTAL (3) (\$)**\$500.00**

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Nathaniel Levin	Registration No. (Attorney/Agent)	34,860	Telephone	203 972-3460
Signature		Date	June 24, 2005		

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Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: OTERO et al.

Application Serial No.: 09/773,139

Filing Date: January 31, 2001

For: APPARATUS, METHODS AND
ARTICLES OF MANUFACTURE
FOR CONSTRUCTING AND
EXECUTING TRANSACTION
PROCESSES AND PROGRAMS

)
)
) Group Art Unit: 3628

)
) Examiner: Jason M. Borlinghaus

)
) **APPEAL BRIEF**

)
) Attorney Docket No.: G08.050

)
) **PTO Customer Number 28062**
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) Five Elm Street
) New Canaan, CT 06840
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Dated: June 24, 2005

By:


Edith Martin

Mail Stop Appeal Brief - Patents
Commissioner for Patents
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Alexandria, VA 22313-1450

Sir:

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner in the Final Office Action mailed March 14, 2005 (the "Final Office Action"), rejecting claims 8, 9, 19-23 and 28-39.

06/28/2005 WABDELRI 00000006 09773139 500.00 DP
01 FC:1402

REAL PARTY IN INTEREST

The present application is assigned to GOLDMAN, SACHS & CO., 85 Broad Street, New York, New York 10004, U.S.A.

RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are known to Appellants, Appellants' legal representative, or assignee, which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 8, 9, 19-23 and 28-39 are pending in this application. All pending claims stand rejected and are now being appealed.

Claims 1-7, 10-18 and 24-27 have previously been canceled.

STATUS OF AMENDMENTS

No amendments were filed after final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

Claim 8

The present invention is concerned with construction of computer software for trading on financial markets (specification, page 2, lines 16-19 and page 3, lines 10-13). More specifically, the present invention addresses the problem of providing trading software that can be easily modified to implement changes in trading algorithms or in the markets in which trading is to occur (specification, page 3, lines 16-24).

Claim 8 is directed to a computerized trading apparatus that includes computer software encoded on a computer-readable medium. The software includes five components: (1) an

engine (reference numeral 10, FIG. 1; specification, page 4, lines 6-11) into which plug-ins such as data, applications, processes, algorithms, etc. may be plugged in to implement a customized trading strategy; (2) a first (algorithm) plug-in for implementing a trading strategy (e.g., process 1, FIGS. 1 and 2; specification, page 5, lines 1-8); (3) a second (market) plug-in (e.g., market specifics plug-in 1, FIGS. 1 and 2; specification, page 5, lines 15-20); (4) a third (algorithm) plug-in (e.g., process 2, FIGS. 1 and 2; specification, page 5, lines 12-14) that may be substituted for the first plug-in; and (5) a fourth (market) plug-in (e.g., market specifics plug-in 2, FIGS. 1 and 2; page 5, lines 15-20) that may be substituted for the third plug-in.

Claim 8 also recites that the second plug-in implements a first limit on trading volume applicable in a first market, and the fourth plug-in implements a different, second limit on trading volume that is applicable in a second market. (Specification, page 5, lines 15-20.)

Claim 19

Claim 19 is an independent method claim argued below together with claim 8. Claim 19 recites providing the five software components enumerated in claim 8, as well as implementing the first and second plug-ins in the engine, and substituting the third plug-in for the second plug-in or substituting the fourth plug-in for the second plug-in. Claim 19 further recites, as in claim 8, that the second plug-in implements a first limit on trading volume applicable in a first market, and the fourth plug-in implements a different, second limit on trading volume that is applicable in a second market.

References to the relevant portions of the drawings and of the specification are the same as those adduced above in connection with claim 8.

Claim 23

Claim 23 is an independent article of manufacture claim that is argued below together with claim 8 and which recites essentially the same software components as claim 8.

Claim 28

Claim 28 is an independent method claim, and recites providing a plurality of algorithm plug-ins each of which is for implementing a respective trading strategy (FIGS. 1 and 2 and page 7, lines 1-22 of the specification). Claim 28 further recites providing a plurality of market plug-

ins each of which is for implementing rules for a respective market (FIGS. 1, 2 and 7 and page 5, lines 15-20 and page 8, lines 11-18 of the specification). Claim 28 further recites selecting one of the algorithm plug-ins and one of the market plug-ins (FIGS. 1, 2, 6-9 and page 5, line 21 to page 6, line 11 of the specification). Claim 28 further recites configuring an engine with the selected algorithm plug-in and the selected market plug-in (FIGS. 1, 2, 6, 7 and page 5 lines 22-26 of the specification). Finally, claim 28 recites using the configured engine to carry out trades (FIGS. 8 and 9 and page 6, lines 26-28 of the specification).

Claim 29

Claim 29 is dependent on claim 28 and is argued separately from claim 28. Claim 29 recites the same limitations, discussed above in connection with claim 8, in regard to two market plug-ins implementing different limits on trading volume.

Claim 35

Claim 35 is an independent apparatus claim that essentially repeats the limitations of claim 28 and which is argued below together with claim 28.

Claim 36

Claim 36 is dependent on claim 35 and is argued separately from claim 35. Claim 36 recites the same limitations referred to above in connection with claim 29.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

(1) Claims 8, 9, 19-21, 23 and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kane (U.S. Patent No. 6,317,728) in view of Satow (U.S. patent publication no. 2004/0024690).

(2) Claims 28 and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kane in view of the Handbook of Investment Technology ("Handbook").

Appellants are of the view that other rejections, more or less explicitly stated by the Examiner under § 103(a), do not present any issues beyond those discussed below in connection with the rejections in reliance on Kane/Satow and Kane/Handbook.¹

ARGUMENT

I. Applicable Law

All of the issues in this appeal are related to rejections under 35 U.S.C. § 103(a). In these rejections, the Examiner found the claims at issue to be obvious in view of combinations of references.

The law governing application of 35 U.S.C. § 103(a) is set forth in general terms as follows in *In re Kotzab*, 217 F.3d 1365 (Fed.Cir. 2000):

A claimed invention is unpatentable if the differences between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art [citing § 103(a)].

¹ Although the Examiner did not expressly apply art to claim 36, he made clear his intention to treat claim 36 like claim 29, and appellants argue claim 36 with claim 29.

Appellants also wish to note the Examiner's disjointed treatment of claims 29 and 36. Even though these claims are dependent on claims 28 and 35, respectively, and so more logically would be discussed after the Kane/Handbook rejection, the Examiner discusses claims 29 and 36 in the section of the Final Action which deals with the Kane/Satow rejection. Appellants believe that it was likely the Examiner's intention to apply a Kane/Handbook/Satow rejection to claims 29 and 36 and appellants therefore treat these two claims accordingly.

In comparing the claimed invention with the prior art, both the claimed subject matter as a whole and the references as a whole must be considered. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 (Fed.Cir. 1985).

The *Kotzab* case further sets out the following standards in regard to proposed combinations of references:

[T]o establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. [Citations omitted]

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. [Citation omitted] In addition, the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. [Citation omitted] The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. [Citation omitted]²

II. Claims 8, 9 and 19-23 are not obvious in view of the Kane and Satow references

Appellants propose that claim 8 be taken as exemplary of this group of claims, all of which should stand or fall together. Claim 8 recites software for computerized trading that includes two algorithm plug-ins that may be substituted for each other in an engine in order to execute a trade. The software of claim 8 also includes two market plug-ins that may be substituted for each other in the engine. One of the market plug-ins implements a first limit on trading volume applicable in a first market, and the other market plug-in implements a second limit on trading volume applicable in a second market. The second limit is different from the first limit.

Next, and before pointing out in detail the errors in the Examiner's rejection of these claims, appellants will provide an overview of the two references relied upon by the Examiner.

The Kane reference is primarily concerned (like the present application) with computer software for a computer used to submit trading orders to a financial trading market. (Kane,

² 217 F.3d at 1370.

column 1, lines 4-8 and 47-50.) Kane's software is presented as particularly suitable for day-trading. (Column 1, line 64 to column 2, line 14; column 18, lines 12-29.) A salient feature of Kane's software is its inclusion of many quasi-independent "agents", each of which is a module or section of computer logic and operates in response to a respective rule for buying or selling securities. (Column 3, lines 10-14 and 30-33; column 5, lines 5-10.)

Each agent module monitors the securities markets on the basis of ticker tape data and from time to time "votes" for a purchase or sale of a security. (Column 5, lines 10-17 and 35-49.) A supervisory component of the software system makes final decisions to place purchase or sale orders based on the voting input from the "agents". (Column 5, lines 45-57.) The system keeps track of whether trades are successful or not, and increases the influence of agents that voted for successful trades and decreases the influence of agents that voted for unsuccessful trades. (Column 8, lines 35-49.)

The Satow reference, unlike the Kane reference and unlike the present application, is primarily concerned with controlling operation of a computer which implements a financial trading marketplace. (Trading system 28, paragraphs 0035 to 0037, which receives orders from broker-dealers 18 (FIG. 1) and executes the orders.) To enforce limits in trading volume on the trading system 28, the trading system 28 includes a volume limiter 40 (FIG. 1) to flag or reject trades that exceed a volume limit. (Paragraphs 0044 to 0046.)

In formulating the rejection of claim 8, the Examiner relied primarily on the Kane reference. In particular, the Examiner cited Kane's intelligent agents as allegedly satisfying both of the substitutable algorithm plug-ins recited in claim 8 and also both of the substitutable market plug-ins recited in claim 8. (Pages 2-3 of the Final Action.) However, the Examiner acknowledged that Kane fails to teach two market plug-ins that respectively implement different trading limits for different markets. (Page 3, next to last paragraph, of the Final Action.)

To make up for this deficiency in the Kane reference, the Examiner proposed to combine teachings of the Satow reference with teachings of the Kane reference. In particular, the Examiner cited the volume limiting component (paragraph 0009) disclosed in Satow, and the Examiner asserted that it would have been obvious to have modified Kane's software by incorporating therein "an algorithm [sic]³ plug-in that implements trading volume limits, as was

³ Given that it was market and not algorithm plug-ins that implemented the volume limits in claim 8, it appears that the Examiner should have referred to a market plug-in at this point.

done by Satow, to protect market liquidity and minimize effect on market prices". In this regard, the Examiner cited paragraphs 0005 to 0007 of the Satow reference.

Appellants contend that the rejection of claim 8 is erroneous in two respects. First, the proposal to combine the teachings of Satow with the teachings of Kane is not logically motivated, taught or suggested, if the two references are considered as a whole. Second, the proposed combination of the two references would fail to produce all of the features of claim 8, and thus the claimed invention as a whole is not obvious in view of the prior art.

Considering first the failure of the prior art to support the Examiner's proposal to combine the two references, appellants note that the thrusts of the two references are in different directions. Kane teaches an improvement for computer software designed to generate orders and send them to a market (or a broker) for execution. Satow teaches an improvement for software to implement a market which receives and executes orders. A person of ordinary skill in the art would recognize this difference between the respective software systems of the two references and would not be led to incorporate an improvement in a market-making computer, as taught by Satow, in a software system that is intended to implement a day-trading strategy or strategies and generate orders, as taught by Kane. The desirable goals, as stated in Satow, of preventing illiquidity of a trading market or dominance of the market by one participant, would not motivate one of ordinary skill in the art to make any modification in particular in software intended to improve day-trading performance, as disclosed in the Kane reference. Satow's teachings about limiting trading volume have nothing to do with any problem posed in the software system disclosed in Kane.

Thus it appears that the Examiner's proposed combination of Satow with Kane is a result of selecting features from the references based on hindsight gleaned from the present invention. Of course, this approach is forbidden by the *Interconnect* case, *supra*, as well as other binding Federal Circuit precedent.⁴

But even if the proposed combination of Satow with Kane were supported by the requisite teaching, motivation or suggestion in the prior art, such a combination would still fail to produce the invention as recited in claim 8. Appellants now emphasize that claim 8 recites two different market plug-ins which implement trading volume limits in two different markets.

⁴ *W.L. Gore & Assocs. v. Garlock*, 721 F.2d 1540 (Fed.Cir. 1983); *ACS Hospital Systems v. Montefiore Hospital*, 732 F.2d 1572 (Fed.Cir 1984).

There is nothing in the teaching of Satow in regard to incorporating a volume limiting component in a single market-making system that would lead one of ordinary skill to recognize the desirability of including, in order-generating software, market plug-ins to implement volume trading limits of two different markets. Neither the need for such a plurality of market plug-ins, nor the benefits in flexible operation that result from the presence of the two market plug-ins, can fairly be inferred from the teachings of the Satow reference. Thus the invention of claim 8, considered as a whole, is not obvious even if the teachings of Kane and Satow are combined as the Examiner proposes.

For either or both of the above reasons, appellants respectfully request that the rejection of claims 8, 9 and 19-23 be reversed.

III. Claims 28 and 35 are not obvious in view of the Kane and Handbook references

Claim 28 is proposed as exemplary of claims 28-39, all of which should be deemed patentable if the following argument for patentability of claim 28 is accepted. However, even if claim 28 is not considered patentable, there are separate grounds for patentability of certain dependent claims in this group, as discussed below.

Claim 28 recites providing a plurality of algorithm plug-ins, each for implementing a respective trading strategy, and a plurality of market plug-ins, each for implementing rules from a respective market. One of the algorithm plug-ins is selected and one of the market plug-ins is selected, and an engine is configured with the selected algorithm and market plug-ins. The configured engine is used to carry out trades in accordance with the trading strategy implemented by the selected algorithm plug-in and in accordance with the market rules implemented by the selected market plug-in.

The Kane reference has been discussed above. As in the rejection of claims 8, etc., the Examiner relied on Kane's intelligent agents as constituting the algorithm and market plug-ins recited in claim 28. The Examiner conceded that Kane fails to teach providing market plug-ins that each implement rules for a respective market (page 8 of the Final Action), but the Examiner proposed to remedy this deficiency by reliance on a passage at page 168 of the Handbook reference.

For convenience of reference, appellants now set forth *verbatim* the passage from the Handbook relied upon by the Examiner:

The compliance module requires a message or process for alerting the trader or portfolio manager of possible violations of defined rules. To accomplish this, each of the orders must be compared on input against a set of decision rules in the form of defined restrictions for the specific securities. ... Merrin Financial's CompAlert product is the most widely installed vendor solution for on-line compliance checking although other products such as McGregor's Predator and Longview's LandMark have well developed compliance modules. ... Check that fund trades do not violate their prospectus limitations or SEC rules.

Appellants respectfully contend that, assuming that the Handbook can be properly combined with Kane, even so the Handbook simply does not contain teaching needed to make up for the admitted deficiency in the Kane reference.

First, appellants note that there is nothing in the above-quoted passage of the Handbook that refers to rules for specific markets. Rather, all of the compliance checking referred to in the passage seems to be concerned with rules of general applicability, such as prospectus limitations or SEC rules. There is nothing in the reference language that would fairly instruct the person of ordinary skill to develop a compliance module to implement rules that apply to a particular market.

Further, the teaching of a single compliance module in the Handbook does not in any way teach the desirability of plural market plug-ins, each implementing rules for a respective market. Even in combination with Kane's intelligent agents (which basically implement trading strategies, not market related rules), the Handbook would not lead one of ordinary skill to recognize the advantages of providing plural market plug-ins as defined in claim 28.

It is therefore respectfully urged that the rejection of claim 28 should be reversed.

IV. Separate Argument in Support of Claims 29 and 36

Claim 29 adds to the method of claim 28⁵ certain limitations discussed above in connection with claims 8, etc., namely that two of the market plug-ins implement different limits

⁵ and claim 36 adds to claim 35...

on trading volume for different markets. In this regard the Examiner relied on the teachings of Satow. As discussed above, it is appellants' position that the Examiner's proposal to combine Satow with Kane is not properly supported by the prior art and does not fully teach the claim limitations at issue.

For these reasons, appellants respectfully submit that claims 29 and 36 are patentable on the same ground as claims 8, etc., and would be patentable even if claim 28 were not.

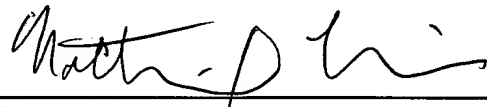
CONCLUSION

The rejections of claims 8, 9, 19-23 and 28-39 are improper at least because combinations of art proposed by the Examiner are not properly suggested by prior art teachings and/or fail to teach or suggest some elements of the claims. Therefore, appellants respectfully request that the Examiner's rejections be reversed.

As required by 37 CFR §41.37(a)(1), this Brief is filed within two months from the date of mailing of Appellants' Notice of Appeal (*i.e.*, within two months of April 29, 2005); as such, no extension of time is believed due. However, if any additional fees are due in conjunction with this matter, the Commissioner is hereby authorized to charge them to Deposit Account 50-1852. An Appendix of claims involved in this appeal is attached hereto.

If any issues remain, or if the Examiner or the Board has any further suggestions for expediting allowance of the present application, kindly contact the undersigned using the information provided below.

Respectfully submitted,



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June 24, 2005
Date

Attachment: Appendix of claims

APPENDIX

1-7. (canceled)

8. An apparatus for computerized trading comprising:

software encoded on a computer-readable medium and capable of execution by a computer, said software including:

- a first algorithm plug-in for implementing a trading strategy,
- a second market plug-in for implementing a trading strategy,
- an engine for providing services to said first and second plug-ins, whereby said first and second plug-ins are implemented in said engine in order to execute a trade,
- a third algorithm plug-in,
- a fourth market plug-in,

whereby either of said third or fourth plug-ins may be substituted for either of said first plug-in or second plug-in respectively, in said engine, in order to execute a trade;

wherein said second market plug-in implements a first limit on trading volume applicable in a first market and said fourth market plug-in implements a second limit on trading volume applicable in a second market, the second limit on trading volume being different from the first limit on trading volume.

9. The apparatus of claim 8 wherein said first and third algorithm plug-ins implement trading strategies selected from a group consisting of:

- Volume Weighted Average Price;
- Ratio;
- Gamma Hedge;
- Aggressive Short Sell;
- Iceberg;
- Auto Trader;
- CB Delta Hedge;
- Stop Loss; and
- Short Sell.

10-18. (canceled)

19. A method for computerized trading comprising:

- providing a first algorithm plug-in for implementing a trading strategy,
- providing a second market plug-in for implementing a trading strategy,
- providing an engine for providing services to either of said first or second plug-ins,
- implementing said first and second plug-ins in said engine,
- providing a third algorithm plug-in,
- providing a fourth market plug-in, and
- substituting either of said third or fourth plug-ins for either of said first plug-in or said second plug-in respectively, in said engine, in order to execute a trade;

wherein said second market plug-in implements a first limit on trading volume applicable in a first market and said fourth market plug-in implements a second limit on trading volume applicable in a second market, the second limit on trading volume being different from the first limit on trading volume.

20. A method as in claim 19, wherein the step of providing a first algorithm plug-in for implementing a trading strategy, further comprise providing a first algorithm plug-in selected from a group consisting of:

- Volume Weighted Average Price;
- Ratio;
- Gamma Hedge;
- Aggressive Short Sell;
- Iceberg;
- Auto Trader;
- CB Delta Hedge;
- Stop Loss; and
- Short Sell.

21. A method as in claim 19, wherein the step of providing a third algorithm plug-in for implementing a trading strategy, further comprise providing a third algorithm plug-in selected from a group consisting of:
- Volume Weighted Average Price;
 - Ratio;
 - Gamma Hedge;
 - Aggressive Short Sell;
 - Iceberg;
 - Auto Trader;
 - CB Delta Hedge;
 - Stop Loss; and
 - Short Sell.
22. The method of claim 19, further comprising the step of initiating a recovery mechanism in the event of system failure.
23. An article for executing computerized trading comprising:
- a computer-readable signal bearing medium;
- software encoded on said computer-readable signal bearing medium, said software including:
- a first plug-in for implementing a trading strategy,
 - a second plug-in for implementing a trading strategy,
 - an engine for providing services to either of said first or second plug-in, whereby said first plug-in is implemented in said engine in order to execute a trade;
 - a third plug-in;
 - a fourth plug-in;
- whereby either of said third or fourth plug-ins may be substituted for either of said first plug-in or second plug-in respectively, in said engine, in order to execute a trade;
- wherein said second plug-in implements a first limit on trading volume applicable in a first market and said fourth plug-in implements a second limit on trading volume applicable in a

second market, the second limit on trading volume being different from the first limit on trading volume.

24-27. (canceled)

28. A method for computerized trading, comprising:

providing a plurality of algorithm plug-ins, each of the algorithm plug-ins for implementing a respective trading strategy from a plurality of trading strategies, all of the trading strategies being different from each other;

providing a plurality of market plug-ins, each of the market plug-ins for implementing rules for a respective market from a plurality of markets, all of the markets being different from each other;

selecting one of the algorithm plug-ins;

selecting one of the market plug-ins;

configuring an engine with the selected one of the algorithm plug-ins and with the selected one of the market plug-ins, the engine being for providing to the selected one of the algorithm plug-ins access to market data and for sending orders on behalf of the selected one of the algorithm plug-ins and for receiving notification of executions of orders on behalf of the selected one of the algorithm plug-ins; and

using the configured engine to carry out trades in accordance with the trading strategy implemented by the selected one of the algorithm plug-ins and in accordance with market rules implemented by the selected one of the market plug-ins.

29. A method as in claim 28, wherein a first one of said market plug-ins implements a first limit on trading volume and a second one of said market plug-ins implements a second limit on trading volume, the second limit being different from the first limit.

30. A method as in claim 28, wherein the plurality of trading strategies implemented respectively by said algorithm plug-ins comprise at least two of the group of trading strategies consisting of: (a) a volume-weighted-average-price strategy; (b) a ratio strategy in which a first instrument is bought and a related instrument is sold in response to a certain ratio between respective prices of the first instrument and the related instrument; (c) a hedging strategy; (d) a short selling strategy; (e) a stop loss strategy; (f) an "iceberg" strategy in which a part that is less than all of an order is sent to market at any given time; and (g) an auto trader strategy to determine whether a trade is to be sent to market or filled from an account.

31. A method as in claim 30, wherein the plurality of trading strategies implemented respectively by said algorithm plug-ins comprise at least three of the group of trading strategies consisting of: (a) a volume-weighted-average-price strategy; (b) a ratio strategy in which a first instrument is bought and a related instrument is sold in response to a certain ratio between respective prices of the first instrument and the related instrument; (c) a hedging strategy; (d) a short selling strategy; (e) a stop loss strategy; (f) an "iceberg" strategy in which a part that is less than all of an order is sent to market at any given time; and (g) an auto trader strategy to determine whether a trade is to be sent to market or filled from an account.

32. A method as in claim 31, wherein the plurality of trading strategies implemented respectively by said algorithm plug-ins comprise at least four of the group of trading strategies consisting of: (a) a volume-weighted-average-price strategy; (b) a ratio strategy in which a first instrument is bought and a related instrument is sold in response to a certain ratio between respective prices of the first instrument and the related instrument; (c) a hedging strategy; (d) a short selling strategy; (e) a stop loss strategy; (f) an "iceberg" strategy in which a part that is less than all of an order is sent to market at any given time; and (g) an auto trader strategy to determine whether a trade is to be sent to market or filled from an account.

33. A method as in claim 28, further comprising:
parameterizing the selected one of the algorithm plug-ins to execute at least one trade.
34. A method as in claim 28, wherein the selecting of one of the algorithm plug-ins includes selecting a selection from a pull-down menu.
35. An apparatus for computerized trading comprising:
software encoded on a computer-readable medium and capable of execution by a computer, said software including:
a plurality of algorithm plug-ins, each of the algorithm plug-ins for implementing a respective trading strategy from a plurality of trading strategies, all of the trading strategies being different from each other;
a plurality of market plug-ins, each of the market plug-ins for implementing rules for a respective market from a plurality of markets, all of the markets being different from each other;
an engine configured with a selected one of the algorithm plug-ins and with a selected one of the market plug-ins, the engine being for:
providing to the selected one of the algorithm plug-ins access to market data;
sending orders on behalf of the selected one of the algorithm plug-ins;
receiving notification of executions of orders on behalf of the selected one of the algorithm plug-ins; and
carrying out trades in accordance with the trading strategy implemented by the selected one of the algorithm plug-ins and in accordance with market rules implemented by the selected one of the market plug-ins.
36. An apparatus as in claim 35, wherein a first one of said market plug-ins implements a first limit on trading volume and a second one of said market plug-ins implements a second limit on trading volume, the second limit being different from the first limit.

37. An apparatus as in claim 35, wherein the plurality of trading strategies implemented respectively by said algorithm plug-ins comprise at least two of the group of trading strategies consisting of: (a) a volume-weighted-average-price strategy; (b) a ratio strategy in which a first instrument is bought and a related instrument is sold in response to a certain ratio between respective prices of the first instrument and the related instrument; (c) a hedging strategy; (d) a short selling strategy; (e) a stop loss strategy; (f) an "iceberg" strategy in which a part that is less than all of an order is sent to market at any given time; and (g) an auto trader strategy to determine whether a trade is to be sent to market or filled from an account.

38. An apparatus as in claim 37, wherein the plurality of trading strategies implemented respectively by said algorithm plug-ins comprise at least three of the group of trading strategies consisting of: (a) a volume-weighted-average-price strategy; (b) a ratio strategy in which a first instrument is bought and a related instrument is sold in response to a certain ratio between respective prices of the first instrument and the related instrument; (c) a hedging strategy; (d) a short selling strategy; (e) a stop loss strategy; (f) an "iceberg" strategy in which a part that is less than all of an order is sent to market at any given time; and (g) an auto trader strategy to determine whether a trade is to be sent to market or filled from an account.

39. An apparatus as in claim 38, wherein the plurality of trading strategies implemented respectively by said algorithm plug-ins comprise at least four of the group of trading strategies consisting of: (a) a volume-weighted-average-price strategy; (b) a ratio strategy in which a first instrument is bought and a related instrument is sold in response to a certain ratio between respective prices of the first instrument and the related instrument; (c) a hedging strategy; (d) a short selling strategy; (e) a stop loss strategy; (f) an "iceberg" strategy in which a part that is less than all of an order is sent to market at any given time; and (g) an auto trader strategy to determine whether a trade is to be sent to market or filled from an account.